

The Effects of Fine Particle Components on Respiratory Hospital Admissions in Children  
 Bart Ostro, Lindsey Roth, Brian Malig, Melanie Marty  
 Supplemental Material

Season	Outcome	Pollutant	Lag	Pooled	Pooled	Excess Risk per			
				Est	SE	IQR	IQR	95% LCL	95% UCL
Full year	Respiratory, 0-18 yrs	PM2.5	0	0.0010	0.0008	14.6	1.4%	-1.0%	3.9%
			1	0.0021	0.0008	14.6	3.1%	0.8%	5.5%
			2	0.0014	0.0009	14.6	2.0%	-0.4%	4.6%
			3	0.0027	0.0008	14.6	4.1%	1.8%	6.4%
		EC	0	0.0024	0.0175	0.8	0.2%	-2.6%	3.1%
			1	0.0253	0.0162	0.8	2.1%	-0.5%	4.8%
			2	0.0167	0.0199	0.8	1.4%	-1.8%	4.7%
			3	0.0640	0.0277	0.8	5.4%	0.8%	10.3%
		OC	0	0.0002	0.0026	4.5	0.1%	-2.2%	2.4%
			1	0.0055	0.0024	4.5	2.5%	0.3%	4.8%
			2	0.0038	0.0040	4.5	1.7%	-1.8%	5.4%
			3	0.0074	0.0026	4.5	3.4%	1.1%	5.7%
		NO3	0	0.0030	0.0022	5.6	1.7%	-0.7%	4.2%
			1	0.0043	0.0020	5.6	2.4%	0.2%	4.8%
			2	0.0008	0.0020	5.6	0.5%	-1.7%	2.7%
			3	0.0058	0.0019	5.6	3.3%	1.1%	5.5%
		SO4	0	0.0186	0.0142	1.5	2.8%	-1.4%	7.2%
			1	0.0213	0.0147	1.5	3.2%	-1.1%	7.8%
			2	0.0036	0.0138	1.5	0.5%	-3.4%	4.7%
			3	0.0199	0.0089	1.5	3.0%	0.4%	5.7%
		Cu	0	0.5142	1.7734	0.0074	0.4%	-2.2%	3.0%
			1	1.1196	1.0833	0.0074	0.8%	-0.7%	2.4%
			2	2.6939	1.1205	0.0074	2.0%	0.4%	3.7%
			3	1.6688	1.7058	0.0074	1.2%	-1.2%	3.8%
		Fe	0	0.1077	0.1497	0.10	1.1%	-1.8%	4.0%
			1	0.2838	0.1393	0.10	2.8%	0.1%	5.7%
			2	0.1285	0.1457	0.10	1.3%	-1.5%	4.2%
			3	0.4609	0.1233	0.10	4.7%	2.2%	7.2%
		K	0	-0.0028	0.0629	0.08	0.0%	-1.0%	1.0%
			1	0.0466	0.0746	0.08	0.4%	-0.8%	1.6%
			2	0.1311	0.0958	0.08	1.1%	-0.5%	2.6%
			3	0.0950	0.0943	0.08	0.8%	-0.7%	2.3%
		Si	0	0.0088	0.0928	0.15	0.1%	-2.5%	2.9%
			1	0.0272	0.0873	0.15	0.4%	-2.1%	3.0%
			2	0.0936	0.0819	0.15	1.4%	-1.0%	3.8%
			3	0.1847	0.0763	0.15	2.8%	0.5%	5.1%
		Zn	0	0.4205	0.4831	0.010	0.4%	-0.5%	1.4%
			1	1.4422	1.1379	0.010	1.5%	-0.8%	3.8%
			2	0.5426	0.4802	0.010	0.6%	-0.4%	1.5%
			3	1.5660	0.9837	0.010	1.6%	-0.4%	3.6%

Season	Outcome	Pollutant	Lag	Pooled	Pooled	Excess Risk per			
				Est	SE	IQR	IQR	95% LCL	95% UCL
Full year	Respiratory, < 5 yrs	PM2.5	0	0.0008	0.0010	14.6	1.2%	-1.5%	4.0%
			1	0.0017	0.0009	14.6	2.5%	-0.1%	5.3%
			2	0.0020	0.0011	14.6	3.0%	-0.2%	6.3%
			3	0.0030	0.0009	14.6	4.5%	1.8%	7.1%
		EC	0	-0.0059	0.0200	0.8	-0.5%	-3.7%	2.8%
			1	0.0209	0.0186	0.8	1.7%	-1.3%	4.9%
			2	0.0185	0.0185	0.8	1.5%	-1.5%	4.6%
			3	0.0707	0.0282	0.8	6.0%	1.3%	11.0%
		OC	0	0.0005	0.0029	4.5	0.2%	-2.3%	2.8%
			1	0.0054	0.0028	4.5	2.5%	-0.1%	5.1%
			2	0.0051	0.0049	4.5	2.3%	-2.0%	6.8%
			3	0.0092	0.0029	4.5	4.2%	1.6%	7.0%
		NO3	0	0.0020	0.0025	5.6	1.1%	-1.6%	3.9%
			1	0.0023	0.0023	5.6	1.3%	-1.3%	3.9%
			2	0.0025	0.0023	5.6	1.4%	-1.1%	3.9%
			3	0.0056	0.0023	5.6	3.2%	0.7%	5.8%
		SO4	0	0.0179	0.0161	1.5	2.7%	-2.0%	7.6%
			1	0.0213	0.0121	1.5	3.2%	-0.4%	7.0%
			2	0.0112	0.0169	1.5	1.7%	-3.2%	6.8%
			3	0.0217	0.0108	1.5	3.3%	0.1%	6.6%
		Cu	0	0.9416	1.9944	0.0074	0.7%	-2.2%	3.7%
			1	1.2662	1.2068	0.0074	0.9%	-0.8%	2.7%
			2	2.3361	1.1723	0.0074	1.8%	0.0%	3.5%
			3	1.6485	2.4948	0.0074	1.2%	-2.4%	5.0%
		Fe	0	0.0349	0.1716	0.10	0.3%	-2.9%	3.7%
			1	0.3018	0.1630	0.10	3.0%	-0.2%	6.3%
			2	0.1874	0.1700	0.10	1.9%	-1.4%	5.3%
			3	0.5092	0.1436	0.10	5.2%	2.3%	8.1%
		K	0	0.0378	0.0667	0.08	0.3%	-0.7%	1.4%
			1	0.0418	0.0695	0.08	0.3%	-0.8%	1.4%
			2	0.1258	0.1281	0.08	1.0%	-1.0%	3.1%
			3	0.1234	0.1034	0.08	1.0%	-0.6%	2.6%
		Si	0	0.0035	0.1088	0.15	0.1%	-3.1%	3.3%
			1	0.0994	0.1020	0.15	1.5%	-1.5%	4.5%
			2	0.1061	0.0955	0.15	1.6%	-1.2%	4.4%
			3	0.1851	0.0912	0.15	2.8%	0.1%	5.5%
		Zn	0	0.3984	0.5528	0.010	0.4%	-0.7%	1.5%
			1	1.4393	1.1737	0.010	1.5%	-0.9%	3.9%
			2	1.1011	0.9527	0.010	1.1%	-0.8%	3.1%
			3	1.6824	1.2069	0.010	1.7%	-0.7%	4.2%

Season	Outcome	Pollutant	Lag	Pooled	Pooled	Excess Risk per			
				Est	SE	IQR	IQR	95% LCL	95% UCL
Full year	Respiratory, 5-18 yrs	PM2.5	0	0.0017	0.0021	14.6	2.5%	-3.3%	8.8%
			1	0.0032	0.0015	14.6	4.8%	0.4%	9.4%
			2	-0.0003	0.0015	14.6	-0.4%	-4.5%	3.9%
			3	0.0026	0.0015	14.6	3.8%	-0.5%	8.3%
		EC	0	0.0431	0.0340	0.8	3.6%	-1.9%	9.5%
			1	0.0482	0.0309	0.8	4.1%	-1.0%	9.4%
			2	0.0041	0.0296	0.8	0.3%	-4.4%	5.3%
			3	0.0277	0.0301	0.8	2.3%	-2.6%	7.4%
		OC	0	0.0008	0.0078	4.5	0.3%	-6.3%	7.5%
			1	0.0069	0.0047	4.5	3.1%	-1.0%	7.5%
			2	0.0032	0.0046	4.5	1.4%	-2.6%	5.7%
			3	0.0027	0.0048	4.5	1.2%	-2.9%	5.6%
		NO3	0	0.0066	0.0043	5.6	3.8%	-1.0%	8.7%
			1	0.0089	0.0053	5.6	5.1%	-0.7%	11.3%
			2	-0.0052	0.0046	5.6	-2.9%	-7.6%	2.1%
			3	0.0069	0.0041	5.6	3.9%	-0.6%	8.7%
		SO4	0	0.0209	0.0266	1.5	3.2%	-4.5%	11.5%
			1	0.0011	0.0380	1.5	0.2%	-10.4%	11.9%
			2	-0.0191	0.0194	1.5	-2.8%	-8.2%	2.9%
			3	0.0156	0.0335	1.5	2.4%	-7.2%	12.9%
		Cu	0	-0.8836	2.2976	0.0074	-0.7%	-3.9%	2.7%
			1	0.7168	2.7023	0.0074	0.5%	-3.4%	4.6%
			2	3.5264	1.9113	0.0074	2.7%	-0.2%	5.6%
			3	0.9833	3.1035	0.0074	0.7%	-3.7%	5.4%
		Fe	0	0.3278	0.3747	0.10	3.3%	-3.9%	11.1%
			1	0.2824	0.2787	0.10	2.8%	-2.6%	8.5%
			2	0.0191	0.2413	0.10	0.2%	-4.4%	5.0%
			3	0.3381	0.2276	0.10	3.4%	-1.1%	8.1%
		K	0	-0.0459	0.1125	0.08	-0.4%	-2.1%	1.4%
			1	0.1308	0.1037	0.08	1.1%	-0.6%	2.7%
			2	0.1341	0.0709	0.08	1.1%	0.0%	2.2%
			3	-0.0092	0.1175	0.08	-0.1%	-1.9%	1.8%
		Si	0	0.0995	0.2157	0.15	1.5%	-4.7%	8.0%
			1	-0.0870	0.2098	0.15	-1.3%	-7.1%	4.9%
			2	0.1120	0.1406	0.15	1.7%	-2.4%	5.9%
			3	0.2062	0.1332	0.15	3.1%	-0.8%	7.2%
		Zn	0	1.5013	1.4258	0.010	1.6%	-1.3%	4.5%
			1	0.6594	1.7475	0.010	0.7%	-2.8%	4.3%
			2	0.4982	1.4973	0.010	0.5%	-2.5%	3.6%
			3	0.7498	0.9227	0.010	0.8%	-1.1%	2.7%

Season	Outcome	Pollutant	Lag	Pooled	Pooled	Excess Risk per			
				Est	SE	IQR	IQR	95% LCL	95% UCL
Full year	Asthma, 0-18 yrs	PM2.5	0	0.0015	0.0016	14.6	2.3%	-2.2%	7.0%
			1	0.0014	0.0017	14.6	2.1%	-2.9%	7.2%
			2	0.0003	0.0025	14.6	0.5%	-6.4%	7.8%
			3	0.0023	0.0015	14.6	3.4%	-0.9%	7.8%
		EC	0	0.0317	0.0358	0.8	2.7%	-3.1%	8.8%
			1	0.0383	0.0443	0.8	3.2%	-3.9%	10.9%
			2	0.0321	0.0446	0.8	2.7%	-4.5%	10.4%
			3	0.0628	0.0339	0.8	5.3%	-0.3%	11.3%
		OC	0	0.0016	0.0050	4.5	0.7%	-3.6%	5.3%
			1	0.0029	0.0067	4.5	1.3%	-4.5%	7.5%
			2	0.0058	0.0078	4.5	2.7%	-4.2%	10.0%
			3	0.0086	0.0067	4.5	4.0%	-2.0%	10.3%
		NO3	0	0.0045	0.0044	5.6	2.5%	-2.3%	7.6%
			1	0.0084	0.0045	5.6	4.8%	-0.2%	10.1%
			2	-0.0022	0.0065	5.6	-1.2%	-8.0%	6.1%
			3	0.0042	0.0045	5.6	2.4%	-2.5%	7.5%
		SO4	0	-0.0054	0.0312	1.5	-0.8%	-9.5%	8.7%
			1	0.0123	0.0298	1.5	1.9%	-6.7%	11.1%
			2	-0.0118	0.0249	1.5	-1.7%	-8.7%	5.7%
			3	0.0026	0.0199	1.5	0.4%	-5.3%	6.4%
		Cu	0	1.4891	1.7579	0.0074	1.1%	-1.4%	3.7%
			1	3.3771	3.2784	0.0074	2.5%	-2.2%	7.6%
			2	1.4246	2.0801	0.0074	1.1%	-2.0%	4.2%
			3	1.7181	2.5808	0.0074	1.3%	-2.5%	5.2%
		Fe	0	0.5123	0.2760	0.10	5.2%	-0.3%	11.0%
			1	0.5016	0.2398	0.10	5.1%	0.3%	10.1%
			2	0.2727	0.2527	0.10	2.7%	-2.2%	7.9%
			3	0.5458	0.2976	0.10	5.5%	-0.4%	11.8%
		K	0	-0.0690	0.1686	0.08	-0.6%	-3.1%	2.1%
			1	-0.0297	0.2101	0.08	-0.2%	-3.5%	3.1%
			2	0.1134	0.1629	0.08	0.9%	-1.6%	3.5%
			3	0.0379	0.0849	0.08	0.3%	-1.0%	1.6%
		Si	0	0.1804	0.1664	0.15	2.7%	-2.1%	7.8%
			1	0.2537	0.1358	0.15	3.8%	-0.2%	8.0%
			2	0.1202	0.1496	0.15	1.8%	-2.5%	6.3%
			3	0.1944	0.1508	0.15	2.9%	-1.5%	7.5%
		Zn	0	0.1121	0.9839	0.010	0.1%	-1.8%	2.1%
			1	0.3869	1.5156	0.010	0.4%	-2.6%	3.5%
			2	1.3867	2.2608	0.010	1.4%	-3.1%	6.1%
			3	1.7594	0.9208	0.010	1.8%	0.0%	3.7%

Season	Outcome	Pollutant	Lag	Pooled	Pooled	Excess Risk per			
				Est	SE	IQR	IQR	95% LCL	95% UCL
Full year	Pneumonia, 0-18 yrs	PM2.5	0	0.0013	0.0015	14.6	1.8%	-2.4%	6.3%
			1	0.0033	0.0018	14.6	4.9%	-0.3%	10.4%
			2	0.0006	0.0015	14.6	0.9%	-3.4%	5.3%
			3	0.0022	0.0014	14.6	3.3%	-0.7%	7.4%
		EC	0	-0.0064	0.0311	0.8	-0.5%	-5.4%	4.6%
			1	0.0304	0.0452	0.8	2.6%	-4.7%	10.4%
			2	0.0110	0.0278	0.8	0.9%	-3.5%	5.6%
			3	0.0623	0.0476	0.8	5.3%	-2.5%	13.8%
		OC	0	0.0010	0.0047	4.5	0.5%	-3.6%	4.8%
			1	0.0098	0.0044	4.5	4.5%	0.5%	8.7%
			2	0.0038	0.0054	4.5	1.7%	-3.0%	6.7%
			3	0.0076	0.0043	4.5	3.5%	-0.4%	7.5%
		NO3	0	0.0051	0.0037	5.6	2.9%	-1.1%	7.1%
			1	0.0043	0.0036	5.6	2.4%	-1.6%	6.6%
			2	-0.0017	0.0041	5.6	-0.9%	-5.3%	3.6%
			3	0.0039	0.0036	5.6	2.2%	-1.8%	6.3%
		SO4	0	0.0357	0.0229	1.5	5.5%	-1.4%	12.8%
			1	0.0296	0.0227	1.5	4.5%	-2.2%	11.7%
			2	-0.0229	0.0263	1.5	-3.4%	-10.5%	4.4%
			3	0.0182	0.0224	1.5	2.8%	-3.8%	9.7%
		Cu	0	0.3466	2.8225	0.0074	0.3%	-3.8%	4.5%
			1	-2.0221	2.9095	0.0074	-1.5%	-5.6%	2.8%
			2	4.9973	1.5154	0.0074	3.8%	1.5%	6.1%
			3	2.9210	2.8720	0.0074	2.2%	-2.0%	6.6%
		Fe	0	-0.2751	0.2736	0.10	-2.7%	-7.7%	2.6%
			1	0.1503	0.2684	0.10	1.5%	-3.6%	6.9%
			2	0.1038	0.3002	0.10	1.0%	-4.7%	7.1%
			3	0.4878	0.2176	0.10	4.9%	0.6%	9.5%
		K	0	-0.1553	0.1356	0.08	-1.2%	-3.3%	0.9%
			1	-0.0002	0.1034	0.08	0.0%	-1.6%	1.6%
			2	0.0918	0.0807	0.08	0.7%	-0.5%	2.0%
			3	0.0837	0.1447	0.08	0.7%	-1.6%	3.0%
		Si	0	-0.1236	0.2121	0.15	-1.8%	-7.7%	4.4%
			1	-0.1290	0.2003	0.15	-1.9%	-7.4%	4.0%
			2	0.0782	0.1524	0.15	1.2%	-3.2%	5.7%
			3	0.2814	0.1534	0.15	4.3%	-0.3%	9.0%
		Zn	0	1.9684	0.7575	0.010	2.0%	0.5%	3.6%
			1	3.0437	2.4148	0.010	3.2%	-1.7%	8.3%
			2	0.2657	0.8519	0.010	0.3%	-1.4%	2.0%
			3	1.8587	2.0641	0.010	1.9%	-2.2%	6.2%

Season	Outcome	Pollutant	Lag	Pooled	Pooled	Excess Risk per			
				Est	SE	IQR	IQR	95% LCL	95% UCL
Full year	Acute Bronchitis, 0-18 yrs	PM2.5	0	0.0022	0.0016	14.6	3.3%	-1.2%	7.9%
			1	0.0036	0.0015	14.6	5.4%	0.9%	10.2%
			2	0.0026	0.0021	14.6	3.8%	-2.3%	10.3%
			3	0.0034	0.0015	14.6	5.1%	0.7%	9.6%
		EC	0	0.0160	0.0333	0.8	1.3%	-4.0%	7.0%
			1	0.0382	0.0323	0.8	3.2%	-2.1%	8.8%
			2	-0.0022	0.0296	0.8	-0.2%	-4.9%	4.7%
			3	0.0525	0.0341	0.8	4.4%	-1.2%	10.4%
		OC	0	0.0055	0.0046	4.5	2.5%	-1.6%	6.8%
			1	0.0114	0.0047	4.5	5.3%	1.0%	9.7%
			2	0.0032	0.0044	4.5	1.5%	-2.4%	5.5%
			3	0.0103	0.0043	4.5	4.8%	0.8%	8.8%
		NO3	0	0.0041	0.0042	5.6	2.3%	-2.3%	7.1%
			1	0.0038	0.0040	5.6	2.2%	-2.2%	6.8%
			2	0.0034	0.0048	5.6	1.9%	-3.2%	7.4%
			3	0.0068	0.0039	5.6	3.9%	-0.4%	8.4%
		SO4	0	0.0299	0.0244	1.5	4.6%	-2.6%	12.3%
			1	0.0347	0.0232	1.5	5.3%	-1.6%	12.7%
			2	0.0336	0.0247	1.5	5.2%	-2.2%	13.0%
			3	0.0449	0.0211	1.5	6.9%	0.5%	13.7%
		Cu	0	2.7036	2.5251	0.0074	2.0%	-1.7%	5.9%
			1	2.7764	2.3793	0.0074	2.1%	-1.4%	5.7%
			2	-0.5556	2.3702	0.0074	-0.4%	-3.8%	3.1%
			3	2.1686	2.5619	0.0074	1.6%	-2.1%	5.5%
		Fe	0	0.1608	0.3119	0.10	1.6%	-4.4%	7.9%
			1	0.3040	0.3099	0.10	3.1%	-3.0%	9.4%
			2	0.2906	0.3454	0.10	2.9%	-3.7%	10.0%
			3	0.3514	0.2705	0.10	3.5%	-1.8%	9.1%
		K	0	0.1085	0.1877	0.08	0.9%	-2.1%	3.9%
			1	0.1476	0.1492	0.08	1.2%	-1.2%	3.6%
			2	0.2439	0.2176	0.08	2.0%	-1.5%	5.5%
			3	0.2549	0.1669	0.08	2.1%	-0.6%	4.8%
		Si	0	0.0325	0.2191	0.15	0.5%	-5.7%	7.1%
			1	0.0323	0.2210	0.15	0.5%	-5.8%	7.1%
			2	0.3993	0.1821	0.15	6.1%	0.6%	11.9%
			3	0.2360	0.1884	0.15	3.6%	-2.0%	9.4%
		Zn	0	0.6812	1.7505	0.010	0.7%	-2.8%	4.3%
			1	0.6633	0.8721	0.010	0.7%	-1.1%	2.5%
			2	2.0064	1.9895	0.010	2.1%	-1.9%	6.2%
			3	1.6770	1.3682	0.010	1.7%	-1.0%	4.6%

Season	Outcome	Pollutant	Lag	Pooled	Pooled	Excess Risk per			
				Est	SE	IQR	IQR	95% LCL	95% UCL
Cool Season (Oct-Mar)	Respiratory, 0-18 yrs	PM2.5	0	0.0008	0.0009	21.5	1.7%	-2.0%	5.6%
			1	0.0022	0.0008	21.5	4.9%	1.2%	8.6%
			2	0.0014	0.0009	21.5	3.0%	-0.6%	6.7%
			3	0.0023	0.0008	21.5	5.1%	1.6%	8.9%
		EC	0	-0.0013	0.0175	1.2	-0.2%	-4.2%	4.0%
			1	0.0176	0.0165	1.2	2.1%	-1.7%	6.1%
			2	0.0100	0.0163	1.2	1.2%	-2.6%	5.1%
			3	0.0553	0.0289	1.2	6.8%	-0.2%	14.2%
		OC	0	-0.0002	0.0027	6.3	-0.2%	-3.4%	3.2%
			1	0.0044	0.0025	6.3	2.8%	-0.3%	6.0%
			2	0.0026	0.0025	6.3	1.6%	-1.5%	4.8%
			3	0.0062	0.0029	6.3	4.0%	0.3%	7.8%
		NO3	0	0.0032	0.0023	8.1	2.6%	-1.1%	6.5%
			1	0.0055	0.0022	8.1	4.6%	1.0%	8.3%
			2	0.0009	0.0022	8.1	0.8%	-2.7%	4.3%
			3	0.0053	0.0021	8.1	4.4%	1.0%	8.0%
		SO4	0	0.0161	0.0156	1.2	2.0%	-1.7%	5.8%
			1	0.0229	0.0131	1.2	2.8%	-0.3%	6.1%
			2	-0.0039	0.0158	1.2	-0.5%	-4.2%	3.4%
			3	0.0173	0.0117	1.2	2.1%	-0.7%	5.0%
		Cu	0	1.1715	1.7280	0.0081	0.9%	-1.8%	3.7%
			1	3.7809	1.4536	0.0081	3.1%	0.8%	5.5%
			2	4.4541	1.4909	0.0081	3.7%	1.2%	6.1%
			3	3.1546	2.4250	0.0081	2.6%	-1.3%	6.6%
		Fe	0	0.0416	0.1703	0.12	0.5%	-3.3%	4.4%
			1	0.2547	0.1497	0.12	3.0%	-0.4%	6.6%
			2	0.1554	0.1558	0.12	1.8%	-1.7%	5.5%
			3	0.4059	0.1338	0.12	4.8%	1.7%	8.0%
		K	0	-0.0705	0.1323	0.11	-0.8%	-3.6%	2.1%
			1	0.2379	0.1196	0.11	2.7%	0.0%	5.4%
			2	0.2857	0.1633	0.11	3.2%	-0.4%	6.9%
			3	0.3500	0.1629	0.11	4.0%	0.3%	7.7%
		Si	0	-0.0289	0.1109	0.13	-0.4%	-3.2%	2.5%
			1	0.1003	0.1049	0.13	1.3%	-1.4%	4.1%
			2	0.1873	0.0964	0.13	2.5%	0.0%	5.0%
			3	0.1624	0.1158	0.13	2.1%	-0.8%	5.2%
		Zn	0	0.3048	0.5012	0.014	0.4%	-1.0%	1.8%
			1	1.3037	1.1981	0.014	1.9%	-1.5%	5.3%
			2	0.5411	0.5021	0.014	0.8%	-0.6%	2.2%
			3	1.3886	0.9338	0.014	2.0%	-0.6%	4.7%

Season	Outcome	Pollutant	Lag	Pooled	Pooled	Excess Risk per			
				Est	SE	IQR	IQR	95% LCL	95% UCL
Cool Season (Oct-Mar)	Respiratory, < 5 yrs	PM2.5	0	0.0006	0.0010	21.5	1.2%	-2.9%	5.6%
			1	0.0020	0.0010	21.5	4.4%	0.2%	8.8%
			2	0.0022	0.0013	21.5	4.7%	-0.8%	10.7%
			3	0.0027	0.0009	21.5	6.0%	1.9%	10.2%
		EC	0	-0.0105	0.0201	1.2	-1.2%	-5.8%	3.5%
			1	0.0151	0.0217	1.2	1.8%	-3.2%	7.1%
			2	0.0187	0.0199	1.2	2.2%	-2.4%	7.1%
			3	0.0602	0.0314	1.2	7.4%	-0.2%	15.6%
		OC	0	-0.0005	0.0030	6.3	-0.3%	-3.9%	3.4%
			1	0.0045	0.0029	6.3	2.9%	-0.7%	6.6%
			2	0.0037	0.0039	6.3	2.3%	-2.4%	7.3%
			3	0.0073	0.0035	6.3	4.7%	0.3%	9.3%
		NO3	0	0.0019	0.0026	8.1	1.6%	-2.6%	5.9%
			1	0.0036	0.0025	8.1	3.0%	-1.1%	7.2%
			2	0.0028	0.0025	8.1	2.3%	-1.6%	6.4%
			3	0.0055	0.0024	8.1	4.6%	0.6%	8.7%
		SO4	0	0.0118	0.0157	1.2	1.4%	-2.3%	5.3%
			1	0.0248	0.0151	1.2	3.1%	-0.6%	6.8%
			2	0.0047	0.0161	1.2	0.6%	-3.2%	4.5%
			3	0.0214	0.0138	1.2	2.6%	-0.7%	6.1%
		Cu	0	1.0521	1.7563	0.0081	0.9%	-1.9%	3.7%
			1	3.9238	1.6056	0.0081	3.2%	0.6%	5.9%
			2	5.1781	1.6293	0.0081	4.3%	1.6%	7.0%
			3	3.9007	3.8749	0.0081	3.2%	-2.9%	9.7%
		Fe	0	0.0149	0.1789	0.12	0.2%	-3.8%	4.3%
			1	0.3143	0.1728	0.12	3.7%	-0.3%	7.9%
			2	0.2765	0.1689	0.12	3.3%	-0.6%	7.3%
			3	0.4440	0.1546	0.12	5.3%	1.6%	9.0%
		K	0	-0.0461	0.1489	0.11	-0.5%	-3.7%	2.8%
			1	0.2892	0.1401	0.11	3.3%	0.2%	6.4%
			2	0.4525	0.2337	0.11	5.1%	-0.1%	10.6%
			3	0.4071	0.1803	0.11	4.6%	0.6%	8.8%
		Si	0	0.0400	0.1297	0.13	0.5%	-2.8%	3.9%
			1	0.2231	0.1195	0.13	3.0%	-0.1%	6.2%
			2	0.2406	0.1112	0.13	3.2%	0.3%	6.2%
			3	0.1761	0.1094	0.13	2.3%	-0.5%	5.2%
		Zn	0	0.3702	0.5744	0.014	0.5%	-1.1%	2.1%
			1	1.2588	1.1366	0.014	1.8%	-1.4%	5.1%
			2	0.8422	0.7682	0.014	1.2%	-0.9%	3.4%
			3	1.5195	1.2065	0.014	2.2%	-1.2%	5.7%

Season	Outcome	Pollutant	Lag	Pooled	Pooled	Excess Risk per			
				Est	SE	IQR	IQR	95% LCL	95% UCL
Cool Season (Oct-Mar)	Respiratory, 5-18 yrs	PM2.5	0	0.0019	0.0020	21.5	4.1%	-4.4%	13.3%
			1	0.0027	0.0020	21.5	6.0%	-2.5%	15.3%
			2	-0.0010	0.0019	21.5	-2.1%	-9.6%	6.0%
			3	0.0015	0.0016	21.5	3.3%	-3.6%	10.6%
		EC	0	0.0356	0.0341	1.2	4.3%	-3.6%	13.0%
			1	0.0304	0.0311	1.2	3.7%	-3.6%	11.5%
			2	-0.0070	0.0299	1.2	-0.8%	-7.5%	6.3%
			3	0.0263	0.0309	1.2	3.2%	-4.0%	10.9%
		OC	0	0.0020	0.0071	6.3	1.3%	-7.3%	10.6%
			1	0.0052	0.0047	6.3	3.4%	-2.5%	9.6%
			2	-0.0002	0.0047	6.3	-0.1%	-5.8%	5.9%
			3	0.0038	0.0049	6.3	2.4%	-3.6%	8.8%
		NO3	0	0.0067	0.0052	8.1	5.6%	-2.9%	14.7%
			1	0.0092	0.0055	8.1	7.8%	-1.3%	17.6%
			2	-0.0060	0.0057	8.1	-4.7%	-13.0%	4.3%
			3	0.0056	0.0040	8.1	4.6%	-1.8%	11.5%
		SO4	0	0.0239	0.0421	1.2	3.0%	-6.9%	13.8%
			1	0.0081	0.0427	1.2	1.0%	-8.8%	11.8%
			2	-0.0239	0.0265	1.2	-2.9%	-8.8%	3.5%
			3	0.0125	0.0374	1.2	1.5%	-7.1%	11.0%
		Cu	0	-0.3236	3.3596	0.0081	-0.3%	-5.4%	5.2%
			1	2.7303	3.7861	0.0081	2.2%	-3.7%	8.5%
			2	2.8309	4.2788	0.0081	2.3%	-4.4%	9.5%
			3	-0.4731	3.5909	0.0081	-0.4%	-5.9%	5.4%
		Fe	0	0.0904	0.4082	0.12	1.1%	-7.9%	10.9%
			1	0.1022	0.3574	0.12	1.2%	-6.7%	9.7%
			2	-0.1580	0.2690	0.12	-1.8%	-7.6%	4.4%
			3	0.3254	0.2516	0.12	3.8%	-1.9%	9.9%
		K	0	-0.0976	0.2808	0.11	-1.1%	-6.9%	5.1%
			1	0.1823	0.2147	0.11	2.0%	-2.6%	6.9%
			2	0.0272	0.2356	0.11	0.3%	-4.7%	5.6%
			3	0.1260	0.2377	0.11	1.4%	-3.7%	6.8%
		Si	0	-0.1591	0.2044	0.13	-2.1%	-7.1%	3.2%
			1	-0.2251	0.2161	0.13	-2.9%	-8.1%	2.6%
			2	-0.0074	0.2265	0.13	-0.1%	-5.7%	5.9%
			3	0.1836	0.1553	0.13	2.4%	-1.6%	6.6%
		Zn	0	1.5640	1.8052	0.014	2.2%	-2.8%	7.5%
			1	0.6066	1.9570	0.014	0.9%	-4.5%	6.5%
			2	-0.7800	2.2809	0.014	-1.1%	-7.2%	5.4%
			3	0.6142	0.9629	0.014	0.9%	-1.8%	3.6%

Season	Outcome	Pollutant	Lag	Pooled	Pooled	Excess Risk per			
				Est	SE	IQR	IQR	95% LCL	95% UCL
Cool Season (Oct-Mar)	Asthma, 0-18 yrs	PM2.5	0	0.0010	0.0017	21.5	2.1%	-4.8%	9.5%
			1	0.0016	0.0018	21.5	3.5%	-4.1%	11.8%
			2	-0.0003	0.0026	21.5	-0.6%	-10.8%	10.9%
			3	0.0022	0.0020	21.5	4.9%	-3.4%	13.9%
		EC	0	0.0160	0.0341	1.2	1.9%	-5.9%	10.4%
			1	0.0168	0.0362	1.2	2.0%	-6.2%	11.0%
			2	0.0006	0.0308	1.2	0.1%	-6.9%	7.5%
			3	0.0409	0.0381	1.2	5.0%	-3.9%	14.7%
		OC	0	-0.0003	0.0052	6.3	-0.2%	-6.4%	6.4%
			1	-0.0017	0.0048	6.3	-1.1%	-6.8%	4.9%
			2	0.0009	0.0055	6.3	0.6%	-6.0%	7.7%
			3	0.0064	0.0070	6.3	4.1%	-4.5%	13.6%
		NO3	0	0.0046	0.0049	8.1	3.8%	-4.0%	12.4%
			1	0.0089	0.0042	8.1	7.5%	0.5%	14.9%
			2	-0.0042	0.0072	8.1	-3.4%	-13.8%	8.3%
			3	0.0082	0.0041	8.1	6.9%	0.1%	14.2%
		SO4	0	0.0018	0.0406	1.2	0.2%	-9.0%	10.4%
			1	0.0268	0.0291	1.2	3.3%	-3.6%	10.7%
			2	-0.0129	0.0311	1.2	-1.6%	-8.6%	6.0%
			3	0.0281	0.0223	1.2	3.5%	-1.9%	9.1%
		Cu	0	2.0548	3.3865	0.0081	1.7%	-3.6%	7.2%
			1	9.3871	3.2778	0.0081	7.8%	2.4%	13.6%
			2	6.9033	5.3098	0.0081	5.7%	-2.8%	15.0%
			3	0.2212	3.4190	0.0081	0.2%	-5.1%	5.7%
		Fe	0	0.2256	0.2953	0.12	2.6%	-4.0%	9.8%
			1	0.4373	0.2594	0.12	5.2%	-0.8%	11.6%
			2	0.1907	0.2910	0.12	2.2%	-4.3%	9.2%
			3	0.3643	0.2973	0.12	4.3%	-2.5%	11.6%
		K	0	-0.2623	0.2637	0.11	-2.9%	-8.3%	2.9%
			1	0.0805	0.2688	0.11	0.9%	-4.8%	7.0%
			2	0.3442	0.2950	0.11	3.9%	-2.6%	10.8%
			3	0.1150	0.2371	0.11	1.3%	-3.8%	6.6%
		Si	0	-0.0718	0.2074	0.13	-0.9%	-6.1%	4.5%
			1	0.3420	0.1975	0.13	4.6%	-0.6%	10.0%
			2	0.2452	0.1722	0.13	3.3%	-1.2%	7.9%
			3	0.1571	0.1998	0.13	2.1%	-3.0%	7.4%
		Zn	0	-0.3045	1.0157	0.014	-0.4%	-3.2%	2.4%
			1	0.2656	1.8181	0.014	0.4%	-4.6%	5.6%
			2	0.8341	2.1889	0.014	1.2%	-4.8%	7.5%
			3	1.4899	0.9502	0.014	2.1%	-0.5%	4.9%

Season	Outcome	Pollutant	Lag	Pooled	Pooled	Excess Risk per			
				Est	SE	IQR	IQR	95% LCL	95% UCL
Cool Season (Oct-Mar)	Pneumonia, 0-18 yrs	PM2.5	0	0.0016	0.0016	21.5	3.4%	-3.2%	10.4%
			1	0.0030	0.0018	21.5	6.7%	-0.9%	14.9%
			2	0.0010	0.0015	21.5	2.3%	-3.9%	8.8%
			3	0.0018	0.0015	21.5	3.8%	-2.4%	10.5%
		EC	0	-0.0011	0.0312	1.2	-0.1%	-7.1%	7.4%
			1	0.0219	0.0484	1.2	2.6%	-8.3%	14.9%
			2	0.0182	0.0311	1.2	2.2%	-5.0%	9.9%
			3	0.0540	0.0446	1.2	6.6%	-3.9%	18.3%
		OC	0	0.0011	0.0048	6.3	0.7%	-5.1%	6.9%
			1	0.0090	0.0045	6.3	5.9%	0.1%	12.0%
			2	0.0034	0.0061	6.3	2.1%	-5.3%	10.2%
			3	0.0060	0.0044	6.3	3.9%	-1.6%	9.7%
		NO3	0	0.0058	0.0039	8.1	4.8%	-1.4%	11.5%
			1	0.0058	0.0042	8.1	4.8%	-1.9%	12.0%
			2	-0.0001	0.0038	8.1	-0.1%	-5.9%	6.1%
			3	0.0029	0.0036	8.1	2.4%	-3.3%	8.4%
		SO4	0	0.0450	0.0232	1.2	5.6%	0.0%	11.6%
			1	0.0311	0.0229	1.2	3.9%	-1.7%	9.7%
			2	-0.0272	0.0299	1.2	-3.3%	-9.9%	3.9%
			3	0.0034	0.0213	1.2	0.4%	-4.6%	5.6%
		Cu	0	5.9789	5.1007	0.0081	4.9%	-3.2%	13.7%
			1	0.5917	2.3876	0.0081	0.5%	-3.2%	4.3%
			2	10.3219	3.6425	0.0081	8.7%	2.6%	15.1%
			3	3.5261	2.9444	0.0081	2.9%	-1.8%	7.8%
		Fe	0	-0.2628	0.3199	0.12	-3.0%	-9.8%	4.3%
			1	0.0689	0.2815	0.12	0.8%	-5.4%	7.5%
			2	0.1552	0.3023	0.12	1.8%	-4.9%	9.0%
			3	0.4500	0.2936	0.12	5.3%	-1.4%	12.6%
		K	0	0.0301	0.2339	0.11	0.3%	-4.6%	5.6%
			1	0.4332	0.2087	0.11	4.9%	0.3%	9.8%
			2	0.2706	0.2093	0.11	3.0%	-1.5%	7.8%
			3	0.4062	0.2146	0.11	4.6%	-0.2%	9.6%
		Si	0	-0.1252	0.2234	0.13	-1.6%	-7.1%	4.2%
			1	-0.2186	0.2695	0.13	-2.8%	-9.3%	4.1%
			2	0.1496	0.1766	0.13	2.0%	-2.5%	6.7%
			3	0.1946	0.2488	0.13	2.6%	-3.8%	9.3%
		Zn	0	2.0457	0.7732	0.014	2.9%	0.8%	5.2%
			1	2.9222	2.4144	0.014	4.2%	-2.5%	11.4%
			2	0.2636	0.8829	0.014	0.4%	-2.1%	2.9%
			3	1.7080	1.8933	0.014	2.4%	-2.8%	8.0%

Season	Outcome	Pollutant	Lag	Pooled	Pooled	Excess Risk per			
				Est	SE	IQR	IQR	95% LCL	95% UCL
Cool Season (Oct-Mar)	Acute Bronchitis, 0-18 yrs	PM2.5	0	0.0017	0.0016	21.5	3.7%	-3.0%	10.9%
			1	0.0040	0.0016	21.5	9.0%	2.0%	16.6%
			2	0.0026	0.0023	21.5	5.7%	-4.3%	16.6%
			3	0.0030	0.0015	21.5	6.6%	0.0%	13.6%
		EC	0	0.0191	0.0337	1.2	2.3%	-5.4%	10.6%
			1	0.0445	0.0323	1.2	5.4%	-2.2%	13.7%
			2	0.0093	0.0302	1.2	1.1%	-5.8%	8.5%
			3	0.0556	0.0330	1.2	6.8%	-1.1%	15.4%
		OC	0	0.0047	0.0047	6.3	3.0%	-2.8%	9.1%
			1	0.0111	0.0047	6.3	7.3%	1.3%	13.7%
			2	0.0038	0.0045	6.3	2.4%	-3.1%	8.2%
			3	0.0097	0.0043	6.3	6.3%	0.8%	12.2%
		NO3	0	0.0024	0.0044	8.1	1.9%	-5.0%	9.4%
			1	0.0050	0.0042	8.1	4.2%	-2.7%	11.4%
			2	0.0030	0.0055	8.1	2.5%	-6.1%	11.8%
			3	0.0049	0.0042	8.1	4.1%	-2.6%	11.2%
		SO4	0	0.0072	0.0288	1.2	0.9%	-5.8%	8.0%
			1	0.0340	0.0269	1.2	4.2%	-2.2%	11.1%
			2	0.0142	0.0263	1.2	1.7%	-4.4%	8.3%
			3	0.0359	0.0253	1.2	4.5%	-1.6%	10.9%
		Cu	0	2.6426	2.8125	0.0081	2.2%	-2.3%	6.8%
			1	5.0655	2.7733	0.0081	4.2%	-0.3%	8.8%
			2	0.2461	2.6566	0.0081	0.2%	-3.9%	4.5%
			3	4.5789	2.9378	0.0081	3.8%	-0.9%	8.7%
		Fe	0	0.1445	0.3227	0.12	1.7%	-5.5%	9.4%
			1	0.3223	0.3162	0.12	3.8%	-3.4%	11.5%
			2	0.4138	0.2989	0.12	4.9%	-2.0%	12.3%
			3	0.2421	0.2829	0.12	2.8%	-3.6%	9.7%
		K	0	0.1061	0.2281	0.11	1.2%	-3.7%	6.3%
			1	0.4869	0.2349	0.11	5.5%	0.3%	11.1%
			2	0.5048	0.4032	0.11	5.8%	-3.1%	15.4%
			3	0.3436	0.2181	0.11	3.9%	-0.9%	8.9%
		Si	0	-0.0731	0.2617	0.13	-1.0%	-7.4%	5.9%
			1	0.1926	0.2495	0.13	2.6%	-3.8%	9.3%
			2	0.5233	0.2065	0.13	7.1%	1.6%	12.9%
			3	0.0890	0.2202	0.13	1.2%	-4.4%	7.0%
		Zn	0	0.7385	1.9160	0.014	1.1%	-4.2%	6.6%
			1	0.7982	0.9048	0.014	1.1%	-1.4%	3.7%
			2	1.4235	1.7416	0.014	2.0%	-2.8%	7.1%
			3	1.6839	1.5064	0.014	2.4%	-1.8%	6.8%